memorandum

DATE: September 17, 2004

REPLY TO

ATTN OF: Office of Air, Water and Radiation Protection Policy and Guidance (EH-41):Koss:6-7964

SUBJECT: Information – Final National Emission Standards for Hazardous Air Pollutants (NESHAP) for

Industrial, Commercial, and Institutional Boilers and Process Heaters

TO: Distribution

On September 13, 2004, the Environmental Protection Agency (EPA) issued a final rule establishing NESHAP for industrial, commercial, and institutional boilers and process heaters (69 FR 55218). The effective date of the rule is November 12, 2004. The rule is available at http://www.eh.doe.gov/oepa/rules/69/69fr55218.pdf. Background information is available at: http://www.epa.gov/ttn/atw/boiler/boilerpg.html. Because the final rule is applicable to some existing coal-fired boilers, and possibly to some process heaters, at Department of Energy (DOE) sites, we are issuing this memorandum to notify DOE elements of its release and to provide reference material. EPA estimates that 58,000 existing boilers and process heaters and 800 new boilers and process heaters built each year over the next five years will be subject to the regulations.

The final rule limits the amount of hazardous air pollutants (HAP) (including hydrogen chloride, manganese, lead, arsenic and mercury) that may be released from exhaust stacks of all new (built after January 13, 2003) and some existing large and limited-use boilers and process heaters that are located at facilities considered to be major sources of HAP. Process heaters are enclosed devices using controlled flame, that are not boilers, where the primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to heat a transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. The Clean Air Act (CAA) defines a major source as a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons per year.

Combustion units that are regulated by other standards and are therefore excluded from this final rule include: solid waste incineration units covered by Section 129 of the CAA; boilers or process heaters required to have a permit under Section 3005 of the Solid Waste Disposal Act (42 USC 6925) or covered by the hazardous waste combustor NESHAP in 40 CFR Part 63, Subpart EEE; and recovery boilers or furnaces covered by 40 CFR Part 63, Subpart MM. Boilers that burn small quantities of hazardous waste under the exemption provided by 40 CFR 266.108 are subject to the final rule.

In 1986, EPA issued New Source Performance Standards (NSPS) for industrial boilers (40 CFR Part 60, Subparts Db and Dc). The NSPS regulate emissions of particulate matter, sulfur dioxide, and nitrogen oxides from boilers constructed after June 19, 1984.

Sources subject to the NSPS are also subject to this final NESHAP rule because the NESHAP rule regulates sources of HAP while the NSPS do not.

The final NESHAP rule establishes emission limits and work practice standards for new or reconstructed solid, liquid or gaseous fuel-fired boilers and process heaters, and it establishes limits and standards for existing large and limited-use solid fuel-fired units. Large units are those boilers and process heaters with heat input capacities greater than 10 million British thermal units per hour. Limited-use units are those large units with capacity utilizations less than or equal to 10 percent as required in a Federally enforceable permit.

Owners of existing industrial boilers and process heaters must comply with the final rule by September 13, 2007. However, owners may petition EPA for an extra year to comply. Owners of new industrial boilers and process heaters must comply with the final rule when the units are brought on line, and have up to six months after the rule is final, or six months after startup, whichever is later, to demonstrate compliance with the new standards.

The final rule contains alternative compliance options to maintain low levels of emissions. The options provide flexibility for owners to meet the final emission limits by altering work practices in ways that will reduce emissions, or by installing emissions control devices such as fabric filters and scrubbers to chemically or physically remove HAPs from the boiler or process heater emissions streams.

The final rule also allows owners to comply with the rule by averaging emissions from all large solid fuel-fired boilers onsite. This emission averaging provision is intended to provide flexibility in compliance and cost and energy savings, while not lessening the stringency of the standards.

Questions on the regulations should be directed to Ted Koss (<theodore.koss@eh.doe.gov>; 202-586-7964) or Emile Boulos (<emile.boulos@eh.doe.gov>; 202-586-1306) of my staff.

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Director

Office of Air, Water and Radiation Protection Policy and Guidance

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